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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,322	09/04/2003	Sujeet Kumar	2950.15US03	5849

7590

07/26/2005

Patterson, Thunte, Skaar & Christensen, P.A.  
4800 IDS Center  
80 South 8th Street  
Minneapolis, MN 55402-2100

EXAMINER
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NGUYEN, CAM N

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/655,322	<b>Applicant(s)</b> KUMAR ET AL.	
	<b>Examiner</b> Cam N. Nguyen	<b>Art Unit</b> 1754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09/04/03 (a CON of appl. 10/271,925).
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- None 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date originally filed.
- 4) ☐ Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102(e)*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-7, 9, 11-15, 17, & 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Horne et al., "hereinafter Horne '287", (US Pat. 6,136,287).

Horne '287 discloses a collection of particles comprising lithium manganese oxide, the collection of particles having an average diameter of less than about 250 nm, wherein the collection of particles have a distribution of particle sizes in which at least about 95 percent of the particles have a diameter greater than about 40 percent of the average diameter and less than about 160 percent of the average diameter (see col. 28, claim 1). The collection of particles have an average diameter from about 5 nm to about 100 nm (see col. 28, claim 2). The collection of particles have an average diameter from about 5 nm to about 25 nm (see col. 28, claim 3). The lithium manganese oxide has a cubic spinel crystal structure (see col. 28, claim 5). The collection of particles includes effectively no particles with a diameter greater than about four times the average diameter (see col. 29, claim 6). Preferably, three times the average diameter, and more preferably two times the average diameter (see col. 17, ln 63-67). Horne '287

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further discloses the collection of particles have a distribution of particle sizes in which at least about 95 percent of the particles have a diameter greater than about 60 percent of the average diameter and less than about 140 percent of the average diameter (see col. 29, claim 7).

Horne '287 discloses the claimed subject matter, thus anticipates the claims.

3. Claims 1-5, 8-13, 16-18, & 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Horne et al., "hereinafter Horne '007", (US Pat. 6,225,007 B1).

Horne '007 discloses a collection of particles comprising metal vanadium oxide, wherein said metal vanadium oxide is selected from the group consisting of copper vanadium oxide, silver vanadium oxide, gold vanadium oxide, and combinations thereof, the particles having an average diameter less than about 1 micron (see col. 20, claim 1). The particles have an average diameter from about 5 nm to about 100 nm (see col. 20, claim 2). The particles have an average diameter from about 5 nm to about 50 nm (see col. 20, claim 3). The particles have an average diameter less than about 500 nm (see col. 21, claim 10). The collection of particles includes less than about 1 particle in 10<sup>6</sup> have a diameter greater than about four times the average diameter of the collection of particles (see col. 20, claim 6). The collection of particles includes less than about 1 particle in 10<sup>6</sup> have a diameter greater than about two times the average diameter of the collection of particles (see col. 21, claim 7). Horne '007 further discloses the collection of particles have a distribution of particle sizes in which at least about 95 percent of the particles have a diameter greater than about 40 percent of the

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average diameter and less than about 160 percent of the average diameter (see col. 21, claim 8). The collection of particles have a distribution of particle sizes in which at least about 95 percent of the particles have a diameter greater than about 60 percent of the average diameter and less than about 140 percent of the average diameter (see col. 21, claim 9). The collection of particles are in the form of crystalline particles (see col. 15, In 29-40). The vanadium oxide particles can be in the form of amorphous nanoparticles (see col. 15, In 48-53).

Horne '007 discloses the claimed subject matter, thus anticipates the claims.

4. This is a CON of applicant's earlier Application No. 10/271,925. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Citations***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Same as set forth in the parent application.

### ***Conclusion***

6. Claims 1-20 are originally pending. Claims 1-20 are rejected. No claims are allowed.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M, W, R, & F, 8:45 AM - 5:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen/cnn  
July 20, 2005

*Cam Nguyen*  
**CAM N. NGUYEN**  
**PRIMARY EXAMINER**  
*AU-1754*